Immunization Case Studies:

A Day at the Clinic

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MONTANA DPHHS

Overview

- Review examples of client presentations for vaccine administration
- Determine what vaccines are needed
- At the end of the session identify 3 resources for determining vaccine administration action

- Credit to Donna Weaver, CDC

Story

- A day at the clinic
- Imagine yourself in a role in the story
- Make a memory
- This is a story about
  - sharing solutions
  - actions you can take to increase your knowledge, skills, and abilities in providing vaccines

The day begins…

- Start of a new day at the clinic
- Smell of coffee brewing
- New staff member to be oriented to administer vaccines
- Review the clinic schedule for today

Skills Checklist for Immunization

The Skills Checklist is a self-assessment tool for health care staff who administer immunizations. To complete it, review the competency areas below and the clinical skills, techniques, and procedures outlined for each of them. Score yourself in the Self-Assessment column. If you check **Need to Improve,** you indicate further study, practice, or change is needed. When you check **Meets or Exceeds,** you indicate you believe you are performing at the expected level of competence, or higher.

Supervisors: Use the Skills Checklist to clarify responsibilities and expectations for staff who administer vaccines. When you use it for performance reviews, give staff the opportunity to score themselves in advance. Next, observe their performance as they provide immunizations to several patients and score in the **Supervisor Review** columns. If improvement is needed, meet with them to develop a **Plan of Action** (p. 2) that will help them achieve the level of competence you expect; circle desired actions or write in others.

The DVD "Immunization Techniques: Best Practices with Infants, Children, and Adults" ensures that staff administer vaccines correctly. Order online at **www.immunize.org/dvd**

		Self-Assessment		Supervisor Review		
Competency	**Clinical Skills, Techniques, and Procedures**	**Need to Improve**	**Meets or Exceeds**	**Need to Improve**	**Meets or Exceeds**	**Plan of Action***
A. Patient/Parent Education	1. Welcomes patient/family, establishes rapport, and answers any questions.					
	2. Explains what vaccines will be given and which type(s) of injection will be done.					
	3. Accommodates language or literacy barriers and special needs of patient/parents to help make them feel comfortable and informed about the procedure.					
	4. Verifies patient/parents received the Vaccine Information Statements for indicated vaccines and had time to read them and ask questions.					
	5. Screens for contraindications. (MA: score NA–not applicable–if this is MD function.)					
	6. Reviews comfort measures and after care instructions with patient/parents, inviting questions.					
B. Medical Protocols	1. Identifies the location of the medical protocols (i.e. immunization protocol, emergency protocol, reference material).					
	2. Identifies the location of the epinephrine, its administration technique, and clinical situations where its use would be indicated.					
	3. Maintains up-to-date CPR certification.					
	4. Understands the need to report any needlestick injury and to maintain a sharps injury log.					
C. Vaccine Handling	1. Checks vial expiration date. Double-checks vial label and contents prior to drawing up.					
	2. Maintains aseptic technique throughout.					
	3. Selects the correct needle size for IM and SC.					
	4. Shakes vaccine vial and/or reconstitutes and mixes using the diluent supplied. Inverts vial and draws up correct dose of vaccine. Rechecks vial label.					
	5. Labels each filled syringe or uses labeled tray to keep them identified.					
	6. Demonstrates knowledge of proper vaccine handling, e.g. protects MMR from light, logs refrigerator temperature.					

Adapted from California Department of Public Health • Immunization Branch

Competency	Clinical Skills, Techniques, and Procedures	Self-Assessment		Supervisor Review		
		Need to Improve	Meets or Exceeds	Need to Improve	Meets or Exceeds	Plan of Action*
D. Administering Immunizations	1. Rechecks the physician's order or instructions against prepared syringes.					
	2. Washes hands and if office policy puts on disposable gloves.					
	3. Demonstrates knowledge of the appropriate route for each vaccine.					
	4. Positions patient and/or restrains the child with parent's help; locates anatomic landmarks specific for IM or SC					
	5. Preps the site with an alcohol wipe using a circular motion from the center to a 2" to 3" circle. Allows alcohol to dry.					
	6. Controls the limb with the non-dominant hand; holds the needle an inch from the skin and inserts it quickly at the appropriate angle (45° for SC or 90° for IM).					
	7. Injects vaccine using steady pressure; withdraws needle at angle of insertion.					
	8. Applies gentle pressure to injection site for several seconds with a dry cotton ball.					
	9. Properly disposes of needle and syringe in sharps container. Properly disposes of live vaccine vial.					
	10. Encourages comfort measures before, during and after the procedure.					
E. Records Procedures	1. Fully documents each immunization in patient's chart: date, lot number, manufacturer, site, VIS date, name/initials.					
	2. If applicable, demonstrates ability to use IZ registry or computer to call up patient record, assess what is due today, and update computer immunization history.					
	3. Asks for and updates patient's record of immunizations and reminds them to bring it to each visit.					

Plan of Action:

Circle desired next steps and write in the agreed deadline and date for the follow-up performance review. **a.** Watch video on immunization techniques. **b.** Review office protocols. **c.** Review manuals, textbooks, wall charts or other guides. **d.** Review package inserts. **e.** Review vaccine handling guidelines or video. **f.** Observe other staff with patients. **g.** Practice injections. **h.** Read Vaccine Information Statements. **i.** Be mentored by someone who has these skills. **j.** Role play with other staff interactions with parents and patients, including age-appropriate comfort measures. **k.** Attend a skills training or other courses or training. **l.** Attend health care customer satisfaction or cultural competency training. **m.** Renew CPR certification. **Other:**_____

Employee Signature _____ Date _____

Supervisor Signature _____ Date _____

Plan of Action Deadline _____

Date of Next Performance Review _____

All Patients we see today will receive:

- Vaccine Information Statements (VIS)
- Screening questionnaire
  - Contraindications and Precautions
- Comfort measure information

Children

Ellie, Case #1, age 9 weeks

Immunization History

- Birth dose Hep B

Here today for 2 month visit

- Screening questionnaire-no concerns

- What vaccines does she need today?
- Where would you look for guidance?

Figure 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger—United States, 2017.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.

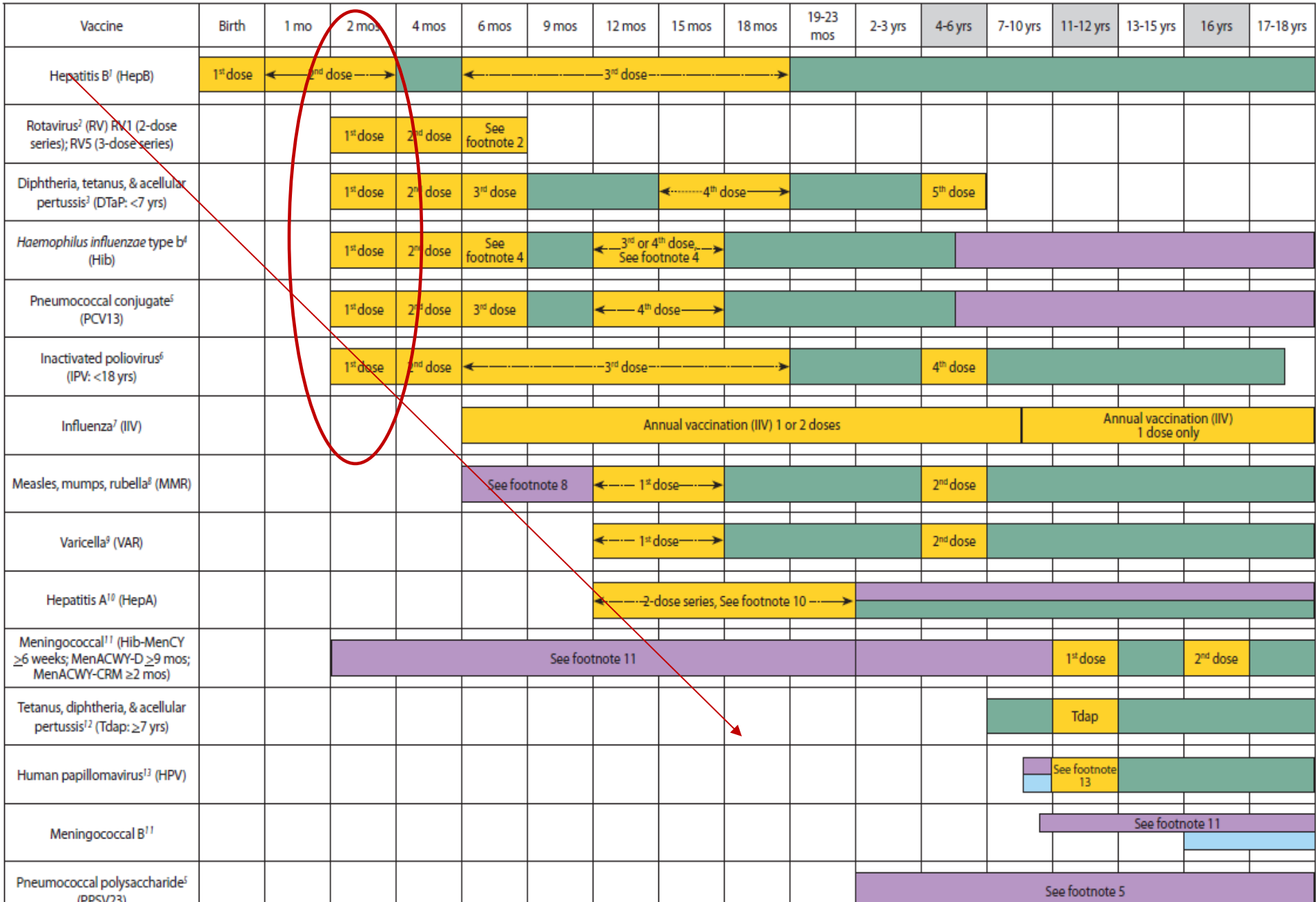
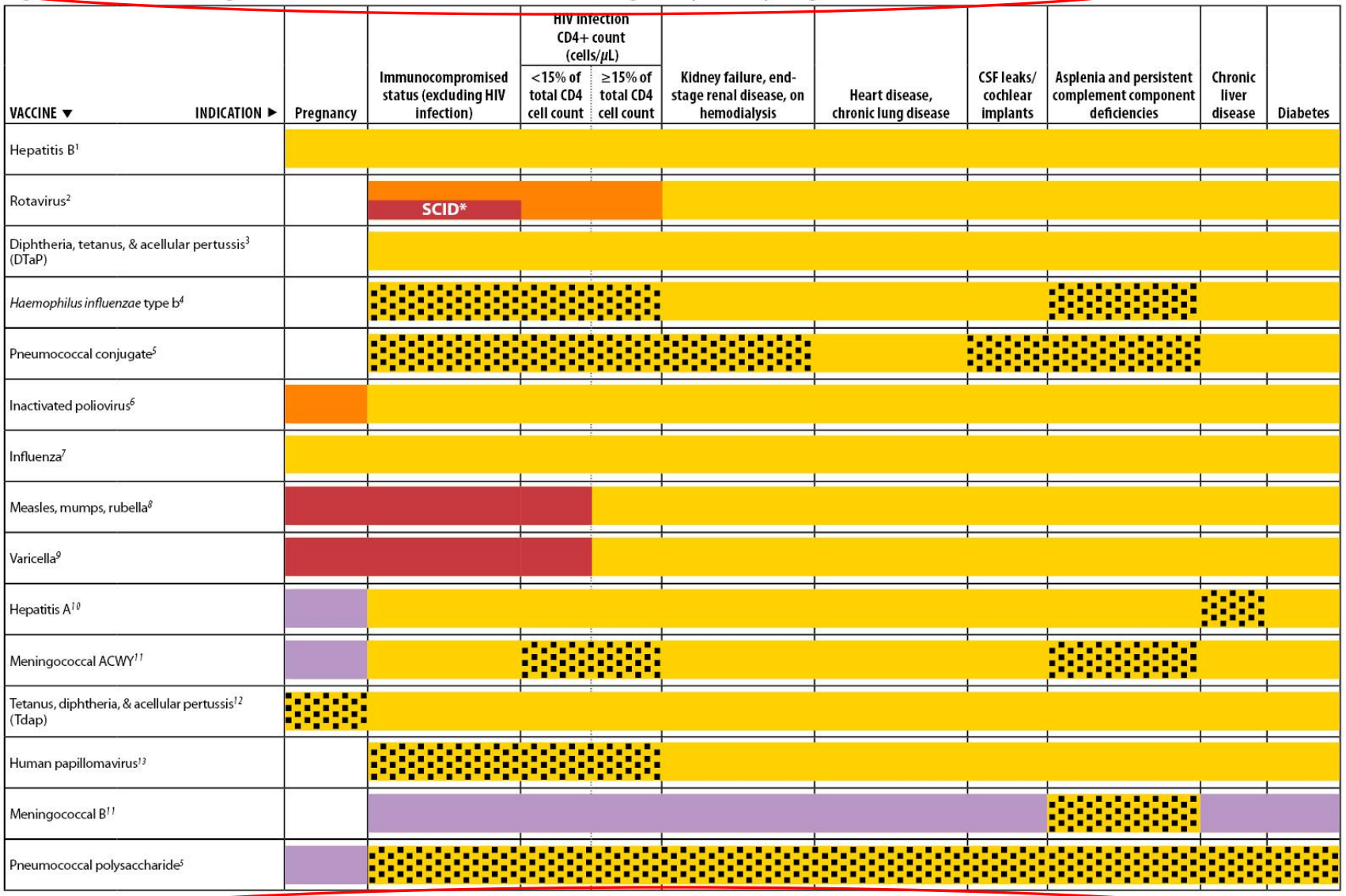


Figure 3. Vaccines that might be indicated for children and adolescents aged 18 years or younger based on medical indications



*Severe Combined Immunodeficiency

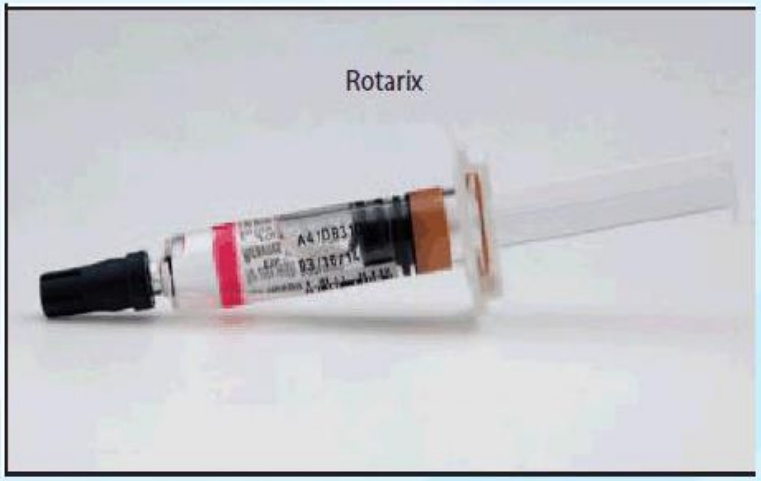
NOTE: The above recommendations must be read along with the footnotes of this schedule.

After assessing Ellie's IZ status she could receive:

- Hepatitis B
- Rotavirus
- DTaP
- HIB
- PCV13
- IPV

Rotavirus Vaccine Schedules

RV5 (RotaTeq) Oral Administration
Administer at ages 2, 4, and 6 months



RV1 (Rotarix) Oral Administration
Administer at ages 2 and 4 months

- For infants who have not received RV vaccine by age 2 months, give the first dose at the earliest opportunity but no later than age 14 weeks 6 days*
- Schedule subsequent doses by observing minimum intervals of 4 weeks between the remaining dose(s)
- If first dose is inadvertently administered at age 15 weeks or older, administer remaining doses*
- Do not administer any RV vaccine beyond the age of 8 months 0 days*

*ACIP off-label: https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/rotavirus.html

Why do ACIP recommendations not always agree with package inserts?

- ACIP statements and FDA package inserts usually are in close agreement
- FDA requires documentation for all data and recommendations made in the insert
- ACIP may use different data based on expert opinion and public health considerations to
  - formulate its recommendations
  - flexibility to its recommendations
- Published recommendations of national advisory groups (such as ACIP or AAP's Committee on Infectious Diseases) should be considered equally as authoritative as those on the package insert

Combination Vaccines

- Combination vaccines may be used when any of the components are indicated and none are contraindicated.
- The minimum interval between doses is the greatest interval between any of the individual antigens.

Pediarix

- Pediarix contains the vaccine components DTaP, IPV, and HepB
- The primary series is 3 doses (0.5 mL) given intramuscularly at 2, 4, and 6 months of age
- Licensed by the Food and Drug Administration
  - for only the first 3 doses of the DTaP series
  - It should not be given to infants younger than 6 weeks of age nor to children 7 years or older

Diphtheria and Tetanus Toxoid- and acellular Pertussis-containing Vaccines

DTaP (Daptacel)

Ages: 6 weeks through 6 years

Use for: Any dose in the series

Route: Intramuscular (IM) injection

DTaP-IPV (Kinrix)

Ages: 4 years through 6 years

Use for: DTaP dose #5

IPV dose #4

Do NOT use for DTaP doses 1 through 4 OR IPV doses 1 through 3

Route: Intramuscular (IM) injection

Read the package insert that accompanies the product to check for the presence of natural rubber or latex.

DTaP (Infanrix)

Ages: 6 weeks through 6 years

Use for: Any dose in the series

Route: Intramuscular (IM) injection

Read the package insert that accompanies the product to check for the presence of natural rubber or latex.

DTaP-IPV-HepB (Pediarix)

Ages: 6 weeks through 6 years

Use for: DTaP and IPV: Doses #1, #2, and/or #3

HepB: Any dose in the series

Do NOT use for HepB birth dose

Route: Intramuscular (IM) injection

Read the package insert that accompanies the product to check for the presence of natural rubber or latex.

Hep B Birth Dose followed by Pediarix

- Use Hep B single-antigen for birth dose
- Pediarix administered at 2, 4, and 6 months
- Dose 4 must be given at 24 weeks or later and at least 16 weeks from dose 1
  - there is no minimum interval between dose 4 and the previous dose.

Pentacel

Pentacel is licensed as a 4-dose series in infants and children at ages 2, 4, 6, and 15–18 months

- It should **not** be used for any dose in the primary series for children
  - age 5 years or older or
  - as the booster dose for children ages 4-6 years
- The DTaP-IPV component is supplied as a sterile liquid, which is used to reconstitute lyophilized (freeze-dried) ActHIB vaccine.
  - The two components of the vaccine should be stored together in the carton to reduce the chance of giving one component of the vaccine without the other
  - The DTaP-IPV component should never be administered alone

Diphtheria and Tetanus Toxoid- and acellular Pertussis-containing Vaccines

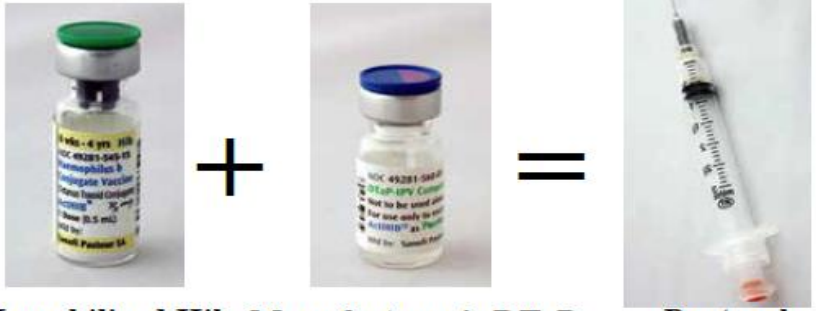
DTaP-IPV/Hib (Pentacel)

Ages: 6 weeks through 4 years
Use for: DTaP and IPV: Doses #1, #2, #3, and/or #4
Hib: Any dose in the series
Route: Intramuscular (IM) injection

Reconstitute Hib powder ONLY with manufacturer-supplied DTaP-IPV liquid diluent

Should be used immediately after reconstitution
Do NOT administer DTaP-IPV w/o Hib

DTaP-IPV/HIB (Pentacel)



Lyophilized Hib component + **Manufacturer's DTaP-IPV liquid component** = **Pentacel vaccine**

Should be used immediately after reconstitution

Adolescents

Joshua, Case #3, age 16 years

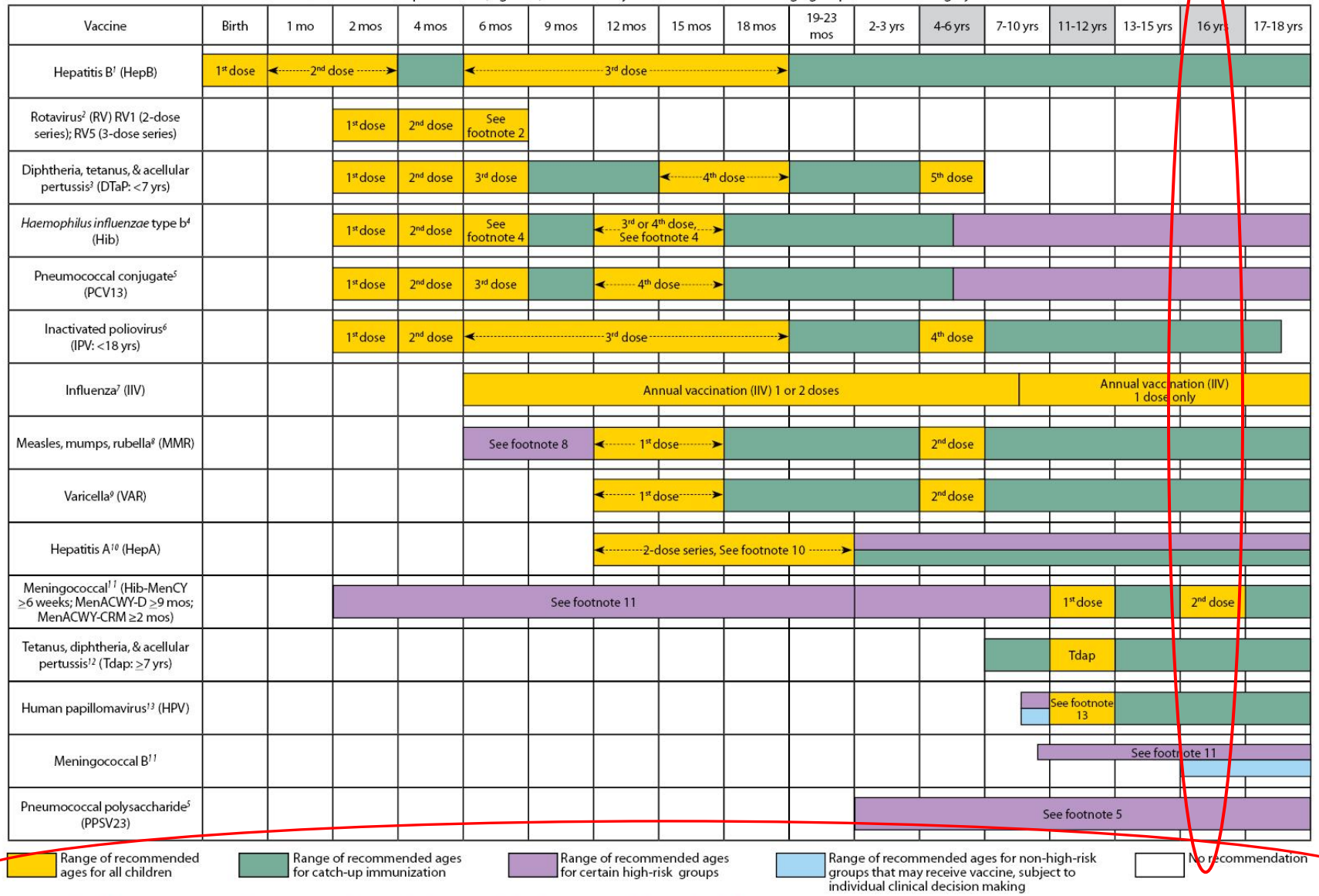
- Immunization history
  - Completed childhood series
  - Tdap at age 11 years

- Screening questionnaire-no concerns
- What vaccines can he receive today?

Figure 1. Recommended Immunization Schedule for Children and Adolescents Aged 18 Years or Younger—United States, 2017.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

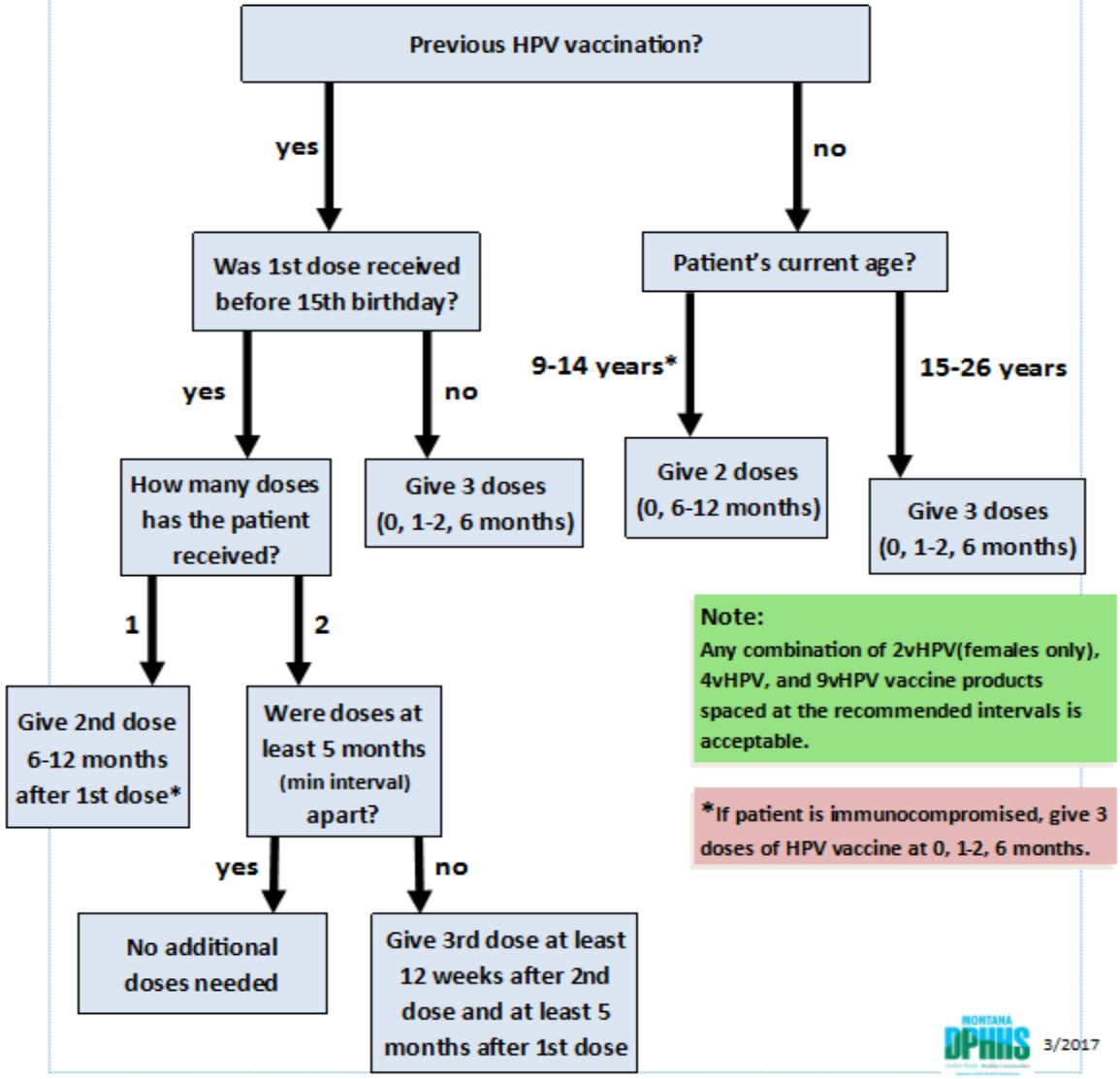
These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded in gray.



NOTE: The above recommendations must be read along with the footnotes of this schedule.

HPV Vaccination Algorithm

Use this algorithm to determine how many doses of HPV vaccine a patient needs.



Note:
Any combination of 2vHPV(females only), 4vHPV, and 9vHPV vaccine products spaced at the recommended intervals is acceptable.

*If patient is immunocompromised, give 3 doses of HPV vaccine at 0, 1-2, 6 months.

MONTANA DPHHS 3/2017

MMWR, Dec 16, 2016, Vol. 65, No 49, pages 1405-1408

Adapted from the Minnesota Department of Health

Meningococcal, Men ACYW

Footnote #11

- **Catch-up vaccination:**
- Administer Menactra or Menveo vaccine at age 13 through 18 years if not previously vaccinated.
- If the first dose is administered at age 13 through 15 years, a booster dose should be administered at age 16 through 18 years, with a minimum interval of at least 8 weeks between doses.
- If the first dose is administered at age 16 years or older, a booster dose is not needed.

Men B, Clinical Discretion:

Footnote # 11

Young adults aged 16 through 23 years (preferred age range is 16 through 18 years)

who are **not at increased risk** for meningococcal disease **may be vaccinated** (for short-term protection) with a 2-dose series of either

- Bexsero (0, ≥1 month)
- Trumenba (0, 6 months)

- The two MenB vaccines are **not** interchangeable

- If the second dose of Trumenba is given at an interval of <6 months, a third dose should be given at least 6 months after the first dose
  - the minimum interval between the second and third dose is 4 weeks

Influenza

Footnote #7

- **Routine vaccination:**
- Administer influenza vaccine annually to all children beginning at age 6 months. For the 2016–17 season, use of live attenuated influenza vaccine (LAIV) is not recommended.
- **For persons aged 9 years and older:**
- Administer 1 dose.

Samuel, Case #2, age 18 months

- Immunization history
  - Birth dose
    - Hep B
  - 2 months received
    - DTaP-IPV-Hep B (Pediarix)
    - Hib
    - PCV13
    - Rota
- What vaccines does he need today?
- Where will you look for guidance?

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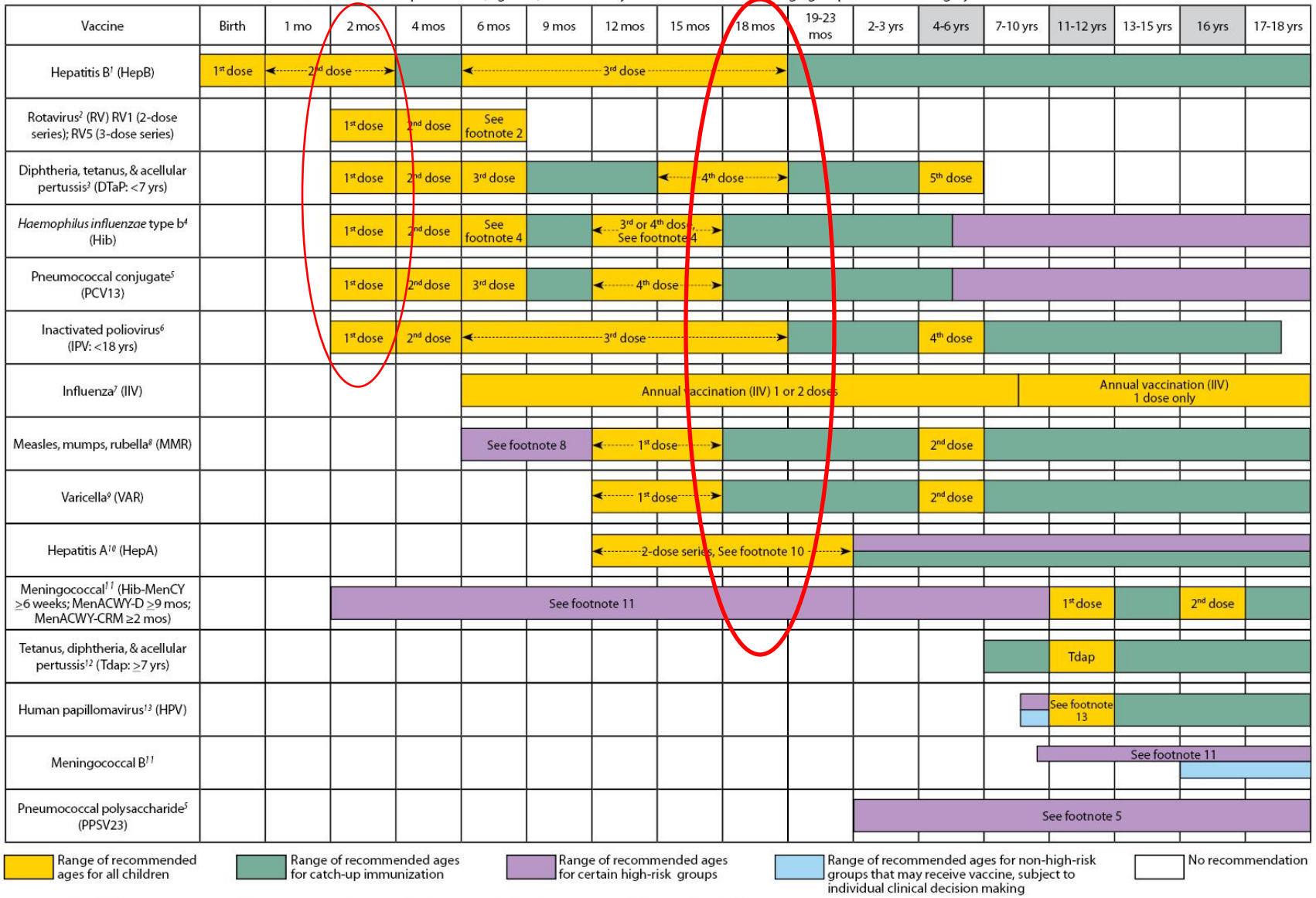

NOTE: The above recommendations must be read along with the footnotes of this schedule.

FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind—United States, 2017.

The figure below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Children age 4 months through 6 years

Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose
Hepatitis B[1]	Birth	4 weeks	8 weeks *and* at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus[2]	6 weeks	4 weeks	4 weeks[2]		
Diphtheria, tetanus, and acellular pertussis[3]	6 weeks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[4]	6 weeks	4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	4 weeks[4] if current age is younger than 12 months **and** first dose was administered at younger than age 7 months, **and** at least 1 previous dose was PRP-T (ActHib, Pentacel, Hiberix) or unknown. 8 weeks *and* age 12 through 59 months (as final dose)[4] • if current age is younger than 12 months **and** first dose was administered at age 7 through 11 months; OR • if current age is 12 through 59 months **and** first dose was administered before the 1st birthday, **and** second dose administered at younger than 15 months; OR • if both doses were PRP-OMP (PedvaxHIB; Comvax) **and** were administered before the 1st birthday. No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal[5]	6 weeks	4 weeks if first dose administered before the 1st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1st birthday or after. No further doses needed for healthy children if first dose was administered at age 24 months or older.	4 weeks if current age is younger than 12 months and previous dose given at <7 months old. 8 weeks (as final dose for healthy children) if previous dose given between 7-11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was given before age 12 months. No further doses needed for healthy children if previous dose administered at age 24 months or older.	8 weeks (as final dose) This dose only necessary for children aged 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus[6]	6 weeks	4 weeks[6]	4 weeks[6]	6 months[6] (minimum age 4 years for final dose).	
Measles, mumps, rubella[8]	12 months	4 weeks			
Varicella[9]	12 months	3 months			
Hepatitis A[10]	12 months	6 months			
Meningococcal[11] (Hib-MenCY ≥6 weeks; MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)	6 weeks	8 weeks[11]	See footnote 11	See footnote 11	

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After assessing Samuel's IZ status he could receive:

- Hep B
- DTaP
- HIB
- PCV13
- IPV
- Influenza
- MMR
- Varicella
- Hep A

Discussion

- Give VIS for all recommended vaccines
- Recommend all
- MMR and Varicella vs MMRV
- Is the child going to day care
- Other

Samuel

- Hep A
  - initiate series at 12-24 months
- MMRV

Children may also get these vaccines as 2 separate shots: **MMR** (measles, mumps and rubella) and **varicella** vaccines.

1 Shot (MMRV) or 2 Shots (MMR & Varicella)?

- Both options give the same protection.
- One less shot with MMRV.
- Children who got the first dose as MMRV have had more fevers and fever-related seizures (about 1 in 1,250) than children who got the first dose as separate shots of MMR and varicella vaccines on the same day (about 1 in 2,500).

Your doctor can give you more information, including the Vaccine Information Statements for MMR and Varicella vaccines.

CDC Immunization Schedules
For Health Care Professionals

BIRTH-18 YEARS & "CATCH-UP" IMMUNIZATION SCHEDULES

Catch-Up Guidance Job Aids

CDC has developed job aids to assist healthcare providers in interpreting figure 2 in the Childhood/Adolescent immunization catch-up schedule.

- Pneumococcal Conjugate Vaccine (PCV) Catch-Up Guidance for Children 4 Months through 18 Years of Age [3 pages]
- *Haemophilus Influenzae* type b-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age
  - Hib Vaccine Products: ActHIB, Pentacel, MenHibRix, or Unknown [3 pages]
  - Hib Vaccine Products: Pedvax and Comvax Vaccines Only [3 pages]
- Diphtheria, Tetanus, and Pertussis-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age [4 pages]

Diphtheria, Tetanus, and Pertussis-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015

IF current age is	AND # of previous Doses of DTaP or DT	AND	AND	THEN	Next Dose Due
4 months through 11 months	Unknown or 0	→	→	Give Dose 1 (DTaP) today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	1	It has been at least 4 weeks since Dose 1	→	Give Dose 2 (DTaP) today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
		It has **not** been at least 4 weeks since Dose 1	→	No dose today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	2	It has been at least 4 weeks since Dose 2	→	Give Dose 3 (DTaP) today	Give Dose 4 (DTaP) at least 6 calendar months after Dose 3 **and** at least 15 months of age
		It has **not** been at least 4 weeks since Dose 2	→	No dose today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
1 through 3 years	Unknown or 0	→	→	Give Dose 1 (DTaP) today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	1	It has been at least 4 weeks since Dose 1	→	Give Dose 2 (DTaP) today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
		It has **not** been 4 weeks since Dose 1	→	No dose today	Give Dose 2 (DTaP) at least 4 weeks after Dose 1
	2	It has been at least 4 weeks since Dose 2	→	Give Dose 3 (DTaP) today	Give Dose 4 (DTaP) at least 6 calendar months after Dose 3
		It has **not** been 4 weeks since Dose 2	→	No dose today	Give Dose 3 (DTaP) at least 4 weeks after Dose 2
	3	It has been at least 6 calendar months since Dose 3	→	If 12 through14 months of age, no dose today	Give Dose 4 (DTaP) at 15 through 18 months of age
				If 15 months of age or older, give Dose 4 (DTaP) today	Give Dose 5 (DTaP) at least 6 months after Dose 4 **and** at 4 through 6 years of age
		It has **not** been 6 calendar months since Dose 3	→	No dose today	Give Dose 4 (DTaP) at least 6 months after Dose 3

Haemophilus Influenzae **type b-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015**

Hib Vaccine Products: ActHIB, Pentacel, MenHibRix, or Unknown

IF current age is	AND # of previous doses is	AND	AND	AND	THEN	NEXT DOSE DUE
15 through 59 Months	Unknown or 0	→	→	→	**Give Dose 1 today (Final Dose)**	**No additional doses needed**
	1	Dose 1 was given **before** 12 months of age	→	→	**Give Dose 2 today (Final Dose)**	**No additional doses needed**
		Dose 1 was given at 12 through 14 months of age	It has been at least 8 weeks since Dose 1	→	**Give Dose 2 today (Final Dose)**	**No additional doses needed**
			It has **not** been 8 weeks since Dose 1	→	**No dose today**	Give Dose 2 (**Final Dose**) at least 8 weeks after Dose 1
		Dose 1 was given at 15 months of age or older	→	→	**No dose today**	**No additional doses needed**
	2	Dose 1 was given **before** 12 months of age	Dose 2 was given **before** 15 months of age	It has been at least 8 weeks since Dose 2	**Give Dose 3 today (Final Dose)**	**No additional doses needed**
				It has **not** been 8 weeks since Dose 2	**No dose today**	Give Dose 3 (**Final Dose**) at least 8 weeks after Dose 2
			Dose 2 was given at 15 months of age or older	→	**No dose today**	**No additional doses needed**
		Dose 1 was given at 12 months of age or older	→	→	**No dose today**	**No additional doses needed**
	3	Dose 2 was given **before**	All doses were given **before** 12 months of age	→	**Give Dose 4 today (Final Dose)**	**No additional doses needed**

Haemophilus Influenzae type b-Containing Vaccines Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015

Hib Vaccine Products: Pedvax and Comvax Vaccines Only

IF current age is	AND # of previous doses is	AND	AND	AND	THEN	NEXT DOSE DUE
15 through 59 Months	0	→	→	→	**Give Dose 1 today (Final Dose)**	**No additional doses needed**
	1	Dose 1 was given **before** 12 months of age	→	→	**Give Dose 2 today (Final Dose)**	**No additional doses needed**
		Dose 1 was given at 12 through 14 months of age	It has been at least 8 weeks since Dose 1	→	**Give Dose 2 today (Final Dose)**	**No additional doses needed**
			It has **not** been 8 weeks since Dose 1	→	**No dose today**	Give Dose 2 at least 8 weeks after Dose 1 **(Final Dose)**
		Dose 1 was given at 15 months of age or older	→	→	**No dose today**	**No additional doses needed**
	2	Dose 1 was given **before** 12 months of age	Dose 2 was given **before** 15 months of age	It has been at least 8 weeks since Dose 2	**Give Dose 3 today (Final Dose)**	**No additional doses needed**
				It has **not** been 8 weeks since Dose 2	**No dose today**	Give dose 3 at least 8 weeks after Dose 2 **(Final Dose)**
			Dose 2 was given at 15 months of age or older	→	**No dose today**	**No additional doses needed**
		Dose 1 was given at 12 months or older	→	→	**No dose today**	**No additional doses needed**

Pneumococcal Conjugate Vaccine (PCV) Catch-Up Guidance for Children 4 Months through 18 Years of Age 2015

IF current age is	AND # of previous doses is	AND	AND	THEN	NEXT DOSE DUE
12-23 months	0	→	→	Give Dose 1 today	Give Dose 2 at least 8 weeks after Dose 1 (**Final Dose**)
	1	Dose 1 was given **before** 12 months of age	It has been at least 4 weeks since Dose 1	Give Dose 2 today	Give Dose 3 at least 8 weeks after Dose 2 (**Final Dose**)
			It has **not** been 4 weeks since Dose 1	No dose today	Gove Dose 2 at least 4 weeks after Dose 1
		Dose 1 was given at 12 months of age or older	It has been at least 8 weeks since Dose 1	Give Dose 2 today (Final Dose)	**No additional doses needed**
			It has **not** been 8 weeks since Dose 1	No dose today	Give Dose 2 at least 8 weeks after dose 1 (**Final Dose**)
	2	Both doses were given **before** 12 months of age	It has been at least 8 weeks since Dose 2	Give Dose 3 today (Final dose)	**No additional doses needed**
			It has **not** been 8 weeks since Dose 2	No dose today	Give Dose 3 at least 8 weeks after Dose 2 (**Final Dose**)
		At least one dose was given at 12 months or older	It has been at least 8 weeks since Dose 2	Give Dose 3 today (Final Dose)	**No additional doses needed**
			It has **not** been 8 weeks since Dose 2	No dose today	Give Dose 3 at least 8 weeks after Dose 2 (**Final Dose**)
	3	All doses were given **before** 12 months of age	It has been at least 8 weeks since Dose 3	Give Dose 4 today (Final Dose)	**No additional doses needed**
			It has **not** been 8 weeks since Dose 3	No dose today	Gove Dose 4 at least 8 weeks after Dose 3 (**Final Dose**)
		1 or more doses was given at 12 months of age or older	→	No dose today	**No additional doses needed**

Bear on a Bike

Adults

Figures 1 and 2 should be read with the footnotes that contain important general information and considerations for special populations.

Figure 1. Recommended immunization schedule for adults aged 19 years or older by age group, United States, 2017

Vaccine	19–21 years	22–26 years	27–59 years	60–64 years	≥ 65 years
Influenza[1]	1 dose annually				
Td/Tdap[2]	Substitute Tdap for Td once, then Td booster every 10 yrs				
MMR[3]	1 or 2 doses depending on indication				
VAR[4]	2 doses				
HZV[5]				1 dose	
HPV–Female[6]	3 doses				
HPV–Male[6]	3 doses				
PCV13[7]	1 dose				
PPSV23[7]	1 or 2 doses depending on indication				1 dose
HepA[8]	2 or 3 doses depending on vaccine				
HepB[9]	3 doses				
MenACWY or MPSV4[10]	1 or more doses depending on indication				
MenB[10]	2 or 3 doses depending on vaccine				
Hib[11]	1 or 3 doses depending on indication				

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended for adults with additional medical conditions or other indications

No recommendation

Figure 2. Recommended immunization schedule for adults aged 19 years or older by medical condition and other indications, United States, 2017

Vaccine	Pregnancy[1-6,9]	Immuno-compromised (excluding HIV infection)[3-7,11]	HIV infection CD4+ count (cells/µL)[3-7,9-11]		Asplenia, persistent complement deficiencies[7,10,11]	Kidney failure, end-stage renal disease, on hemodialysis[7,9]	Heart or lung disease, chronic alcoholism[7]	Chronic liver disease[7-9]	Diabetes[7,9]	Healthcare personnel[3,4,9]	Men who have sex with men[6,8,9]
			< 200	≥ 200							
Influenza[1]	1 dose annually										
Td/Tdap[2]	1 dose Tdap each pregnancy	Substitute Tdap for Td once, then Td booster every 10 yrs									
MMR[3]	contraindicated			1 or 2 doses depending on indication							
VAR[4]	contraindicated			2 doses							
HZV[5]	contraindicated			1 dose							
HPV–Female[6]		3 doses through age 26 yrs									
HPV–Male[6]		3 doses through age 26 yrs		3 doses through age 21 yrs							3 doses through age 26 yrs
PCV13[7]		1 dose									
PPSV23[7]		1, 2, or 3 doses depending on indication									
HepA[8]	2 or 3 doses depending on vaccine										
HepB[9]	3 doses										
MenACWY or MPSV4[10]	1 or more doses depending on indication										
MenB[10]	2 or 3 doses depending on vaccine										
Hib[11]	3 doses post-HSCT recipients only	1 dose									

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended for adults with additional medical conditions or other indications

Contraindicated

No recommendation

Table. Contraindications and precautions for vaccines recommended for adults aged 19 years or older*

The Advisory Committee on Immunization Practices (ACIP) recommendations and package inserts for vaccines provide information on contraindications and precautions related to vaccines. Contraindications are conditions that increase chances of a serious adverse reaction in vaccine recipients and the vaccine should not be administered when a contraindication is present. Precautions should be reviewed for potential risks and benefits for vaccine recipient. For a person with a severe allergy to latex, e.g., anaphylaxis, vaccines supplied in vials or syringes that contain natural rubber latex should not be administered unless the benefit of vaccination clearly outweighs the risk for a potential allergic reaction. For latex allergies other than anaphylaxis, vaccines supplied in vials or syringes that contain dry, natural rubber or natural rubber latex may be administered.

Contraindications and precautions for vaccines routinely recommended for adults

Vaccine	Contraindications	Precautions
All vaccines routinely recommended for adults	• Severe reaction, e.g., anaphylaxis, after a previous dose or to a vaccine component	• Moderate or severe acute illness with or without fever

Additional contraindications and precautions for vaccines routinely recommended for adults

Vaccine	Additional Contraindications	Additional Precautions
IIV[1]		• History of Guillain-Barré Syndrome within 6 weeks after previous influenza vaccination • Egg allergy other than hives, e.g., angioedema, respiratory distress, lightheadedness, or recurrent emesis; or required epinephrine or another emergency medical intervention (IIV may be administered in an inpatient or outpatient medical setting and under the supervision of a healthcare provider who is able to recognize and manage severe allergic conditions)
RIV[1]		• History of Guillain-Barré Syndrome within 6 weeks after previous influenza vaccination
LAIV[1]	• LAIV should not be used during 2016–2017 influenza season	• LAIV should not be used during 2016–2017 influenza season
Tdap/Td	• For pertussis-containing vaccines: encephalopathy, e.g., coma, decreased level of consciousness, or prolonged seizures, not attributable to another identifiable cause within 7 days of administration of a previous dose of a vaccine containing tetanus or diphtheria toxoid or acellular pertussis	• Guillain-Barré Syndrome within 6 weeks after a previous dose of tetanus toxoid-containing vaccine • History of Arthus-type hypersensitivity reactions after a previous dose of tetanus or diphtheria toxoid-containing vaccine. Defer vaccination until at least 10 years have elapsed since the last tetanus toxoid-containing vaccine • For pertussis-containing vaccine, progressive or unstable neurologic disorder, uncontrolled seizures, or progressive encephalopathy (until a treatment regimen has been established and the condition has stabilized)
MMR[2]	• Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy[3], human immunodeficiency virus (HIV) infection with severe immunocompromise • Pregnancy	• Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)[4] • History of thrombocytopenia or thrombocytopenic purpura • Need for tuberculin skin testing[5]
VAR[2]	• Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy[3], HIV infection with severe immunocompromise • Pregnancy	• Recent (within 11 months) receipt of antibody-containing blood product (specific interval depends on product)[4] • Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)
HZV[2]	• Severe immunodeficiency, e.g., hematologic and solid tumors, chemotherapy, congenital immunodeficiency or long-term immunosuppressive therapy[3], HIV infection with severe immunocompromise • Pregnancy	• Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination)
HPV vaccine		• Pregnancy
PCV13	• Severe allergic reaction to any vaccine containing diphtheria toxoid	

1. For additional information on use of influenza vaccines among persons with egg allergy, see: CDC. Prevention and control of seasonal influenza with vaccines: recommendations of the Advisory Committee on Immunization Practices—United States, 2016–17 influenza season. MMWR 2016;65(RR-5):1–54. Available at www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm.
2. MMR may be administered together with VAR or HZV on the same day. If not administered on the same day, separate live vaccines by at least 28 days.
3. Immunosuppressive steroid dose is considered to be daily receipt of 20 mg or more prednisone or equivalent for two or more weeks. Vaccination should be deferred for at least 1 month after discontinuation of immunosuppressive steroid therapy. Providers should consult ACIP recommendations for complete information on the use of specific live vaccines among persons on immune-suppressing medications or with immune suppression because of other reasons.
4. Vaccine should be deferred for the appropriate interval if replacement immune globulin products are being administered. See: CDC. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2011;60(No. RR-2). Available at www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm.
5. Measles vaccination may temporarily suppress tuberculin reactivity. Measles-containing vaccine may be administered on the same day as tuberculin skin testing, or should be postponed for at least 4 weeks after vaccination.

* Adapted from: CDC. Table 6. Contraindications and precautions to commonly used vaccines. General recommendations on immunization: recommendations of the Advisory Committee on Immunization Practices. MMWR 2011;60(No. RR-2):40–41 and from: Hamborsky J, Kroger A, Wolfe S, eds. Appendix A. Epidemiology and prevention of vaccine preventable diseases. 13th ed. Washington, DC: Public Health Foundation, 2015. Available at www.cdc.gov/vaccines/pubs/pinkbook/index.html.

Acronyms of vaccines recommended for adults

HepA	hepatitis A vaccine	LAIV	live attenuated influenza vaccine	PCV13	13-valent pneumococcal conjugate vaccine
HepA-HepB	hepatitis A and hepatitis B vaccines	MenACWY	serogroups A, C, W, and Y meningococcal conjugate vaccine	PPSV23	23-valent pneumococcal polysaccharide vaccine
HepB	hepatitis B vaccine			RIV	recombinant influenza vaccine
Hib	*Haemophilus influenzae* type b conjugate vaccine	MenB	serogroup B meningococcal vaccine	Td	tetanus and diphtheria toxoids
HPV vaccine	human papillomavirus vaccine	MMR	measles, mumps, and rubella vaccine	Tdap	tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine
HZV	herpes zoster vaccine	MPSV4	serogroups A, C, W, and Y meningococcal polysaccharide vaccine	VAR	varicella vaccine
IIV	inactivated influenza vaccine				

CS270457-A

Heather, Case #4, age 25 years

- Immunization history
  - Childhood immunization series complete, but not varicella
  - No vaccines in the last year
- Screening questionnaire-
    - yes to question #9, she is pregnant

Clicker

- What vaccines can Heather receive today?
  a) Influenza
  b) Tdap
  c) Varicella
  d) MMR

Figure 2. Recommended immunization schedule for adults aged 19 years or older by medical condition and other indications, United States, 2017

Vaccine	Pregnancy[1-6,9]	Immuno-compromised (excluding HIV infection)[3-7,11]	HIV infection CD4+ count (cells/µL)[3-7,9-11]		Asplenia, persistent complement deficiencies[7,10,11]	Kidney failure, end-stage renal disease, on hemodialysis[7,9]	Heart or lung disease, chronic alcoholism[7]	Chronic liver disease[7-9]	Diabetes[7,9]	Healthcare personnel[3,4,9]	Men who have sex with men[6,8,9]
			< 200	≥ 200							
Influenza[1]	1 dose annually										
Td/Tdap[2]	1 dose Tdap each pregnancy	Substitute Tdap for Td once, then Td booster every 10 yrs									
MMR[3]	contraindicated	1 or 2 doses depending on indication									
VAR[4]	contraindicated	2 doses									
HZV[5]	contraindicated			1 dose							
HPV–Female[6]		3 doses through age 26 yrs									
HPV–Male[6]		3 doses through age 26 yrs			3 doses through age 21 yrs						3 doses through age 26 yrs
PCV13[7]		1 dose									
PPSV23[7]		1, 2, or 3 doses depending on indication									
HepA[8]		2 or 3 doses depending on vaccine									
HepB[9]		3 doses									
MenACWY or MPSV4[10]		1 or more doses depending on indication									
MenB[10]		2 or 3 doses depending on vaccine									
Hib[11]		3 doses post-HSCT recipients only		1 dose							

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended for adults with additional medical conditions or other indications

Contraindicated

No recommendation

Heather

- Influenza
  - Pregnant women and women who might become pregnant in the upcoming influenza season should receive IIV.
- Tdap
  - Pregnant women should receive 1 dose of Tdap during each pregnancy, preferably during the early part of gestational weeks 27–36, regardless of prior history of receiving Tdap.

Heather

- Varicella
  - Currently contraindicated
- MMR
  - Currently contraindicated
  - ACIP recommends that vaccinated women of childbearing age who have received 1 or 2 doses of rubella-containing vaccine and have a rubella serum IgG level that is not clearly positive, should received 1 additional dose of MMR vaccine (maximum of 3 doses). Repeat testing is not recommended.

  http://www.immunize.org/askexperts/experts_mmr.asp

Maternal Vaccination

Resources for healthcare professionals

Vaccines help keep your pregnant patients and their growing families healthy.

Last Updated September, 2016

Vaccine	Before pregnancy	During pregnancy	After pregnancy	Type of vaccine
Influenza	Yes	Yes, during flu season	Yes	Inactivated
Tdap	May be recommended; it is better to vaccinate during pregnancy when possible	Yes, during **each** pregnancy	Yes, immediately postpartum, if Tdap never received in lifetime; it is better to vaccinate during pregnancy	Toxoid/ Inactivated
Td	May be recommended	May be recommended, but Tdap is preferred	May be recommended	Toxoid
Hepatitis A	May be recommended	May be recommended	May be recommended	Inactivated
Hepatitis B	May be recommended	May be recommended	May be recommended	Inactivated
Meningococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
Pneumococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
HPV	May be recommended (through 26 years of age)	No	May be recommended (through 26 years of age)	Inactivated
MMR	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live
Varicella	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live

Robert, Case #5, age 65 years

- Immunization history
  - Tdap
  - PPSV23
- Screening questionnaire:
  - DOB 2/20/1952
- Do I Need Any Vaccinations Today?
  - Spleen removed 5 years ago - car accident
- History of military service

YOUR NAME _____ DATE OF BIRTH ____/____/____ TODAY'S DATE ____/____/____
(month / day / year)

Which Vaccines Do I Need Today?

Vaccines are an important part of helping you stay healthy. Which of these recommended vaccines do you need? Check the boxes that apply to you, and then talk this over with your healthcare provider.

Influenza ("flu") vaccine

- ☐ I have not had my flu vaccine yet this season *(early fall through late spring)*.

Pneumococcal ("pneumonia") vaccines [Prevnar 13 [PCV13] and Pneumovax 23 [PPSV23])

I am *age 65 or older* and:

- ☐ I have never received any pneumonia vaccine (or I don't remember if I have).
- ☐ I have received only 1 pneumonia vaccine since I turned 65.
- ☐ I received 1 or 2 doses of pneumonia vaccine before I turned 65, and it's now been more than 5 years since I received my last dose.

I am *younger than age 65* and:

- ☐ I have never received any pneumonia vaccine AND at least one of the following applies to me:
  - I smoke cigarettes and I am age 19 years or older.
  - I have a chronic disease of the heart, lung (including asthma, if I am age 19 years or older), liver, or kidneys, or I have sickle cell disease.
  - I have diabetes or alcoholism.
  - I have a weakened immune system due to cancer, Hodgkin's disease, leukemia, lymphoma, multiple myeloma, kidney failure, HIV/AIDS *or* receiving radiation therapy *or* taking a medicine that affects my immune system.
  - I live in a nursing home or other long-term care facility.
- ☐ I have had an organ or bone marrow transplant.
- ☐ I have had my spleen removed *or* have had a cochlear (inner ear) implant *or* have been told by a healthcare provider that I have leaking spinal fluid.

Figure 2. Recommended immunization schedule for adults aged 19 years or older by medical condition and other indications, United States, 2017

Vaccine	Pregnancy[1-6,9]	Immuno-compromised (excluding HIV infection)[3-7,11]	HIV infection CD4+ count (cells/µL)[3-7,9-11]		Asplenia, persistent complement deficiencies[7,10,11]	Kidney failure, end-stage renal disease, on hemodialysis[7,9]	Heart or lung disease, chronic alcoholism[7]	Chronic liver disease[7-9]	Diabetes[7,9]	Healthcare personnel[3,4,9]	Men who have sex with men[6,8,9]
			< 200	≥ 200							
Influenza[1]	1 dose annually										
Td/Tdap[2]	1 dose Tdap each pregnancy	Substitute Tdap for Td once, then Td booster every 10 yrs									
MMR[3]	contraindicated			1 or 2 doses depending on indication							
VAR[4]	contraindicated			2 doses							
HZV[5]	contraindicated			1 dose							
HPV–Female[6]		3 doses through age 26 yrs									
HPV–Male[6]		3 doses through age 26 yrs		3 doses through age 21 yrs							3 doses through age 26 yrs
PCV13[7]		1 dose									
PPSV23[7]	1, 2, or 3 doses depending on indication										
HepA[8]	2 or 3 doses depending on vaccine										
HepB[9]	3 doses										
MenACWY or MPSV4[10]	1 or more doses depending on indication										
MenB[10]	2 or 3 doses depending on vaccine										
Hib[11]	3 doses post-HSCT recipients only	1 dose									

Recommended for adults who meet the age requirement, lack documentation of vaccination, or lack evidence of past infection

Recommended for adults with additional medical conditions or other indications

Contraindicated

No recommendation

Pneumococcal

footnote # 7

Special populations

- Adults aged 19 years or older with immunocompromising conditions or anatomical or functional asplenia (described below) should receive
  - PCV13 and a dose of PPSV23 at least 8 weeks after PCV13, followed by a second dose of PPSV23 at least 5 years after the first dose of PPSV23
- But,
  - If the most recent dose of PPSV23 was administered before age 65 years, at age 65 years or older, administer another dose of PPSV23 at least 8 weeks after PCV13 and at least 5 years after the most recent dose of PPSV23

Meningococcal

Footnote # 10

Special populations

- Adults with anatomical or functional asplenia or persistent complement component deficiencies should receive
  - 2-dose primary series of serogroups A, C, W, and Y meningococcal conjugate vaccine (MenACWY) at least 2 months apart and revaccinate every 5 years
  - Serogroup B meningococcal vaccine (MenB) with either a
    - 2-dose series of MenB-4C (Bexsero) at least 1 month apart or
    - 3-dose series of MenB-FHbp (Trumenba) at 0, 1–2, and 6 months.

General Rule*

- All vaccines can be administered at the same visit as all other vaccines.*

*exception:

in persons with functional or anatomic asplenia, pneumococcal conjugate vaccine (PCV13) and Menactra brand meningococcal conjugate vaccines should **not** be administered at the same visit; separate these vaccines by at least 4 weeks

Haemophilus Influenzae type B

Footnote # 11

Special populations

- Adults who have anatomical or functional asplenia or sickle cell disease, or are undergoing elective splenectomy should receive
  - 1 dose of *Haemophilus influenzae* type b conjugate vaccine (Hib) if they have not previously received Hib.
- Hib should be administered at least 14 days before splenectomy.

Pneumococcal Vaccine Timing–For Adults

DO NOT administer PCV13 and PPSV23 at the same visit.

Age 65 Years or Older

- If PCV13 was given before age 65 years, no additional PCV13 is needed.

No history of pneumococcal vaccine → PCV 13 (Prevnar 13®) → 1 year (8 weeks for groups B & C as defined below) → PPSV 23 (Pneumovax® 23)

Received PPSV23 before age 65 → 1 year → PCV 13 → 1 year (8 weeks for groups B & C as defined below) **and 5 years** after prior dose of PPSV23 → PPSV 23

Received PPSV23 at age 65 or older → 1 year → PCV 13

Age 19-64 Years With Underlying Condition(s)

- Prior doses count toward doses recommended below and do not need to be repeated.
- If PPSV23 given previously – wait one year before giving PCV13
  – for group B, wait at least five years before giving a second dose of PPSV23.
- No more than two doses of PPSV23 recommended before 65th birthday and one dose thereafter.

A. Smoker, or Chronic conditions:
- heart disease (excluding hypertension)
- lung disease (including asthma)
- liver disease (including cirrhosis)
- diabetes
- alcoholism

→ PPSV 23

B. Immunocompromised (including HIV infection), **Chronic renal failure, Nephrotic syndrome, or Asplenia** (including sickle cell)

→ PCV 13 → 8 weeks → PPSV 23 → 5 years → PPSV 23

C. CSF leaks or Cochlear implants

→ PCV 13 → 8 weeks → PPSV 23

CDPH

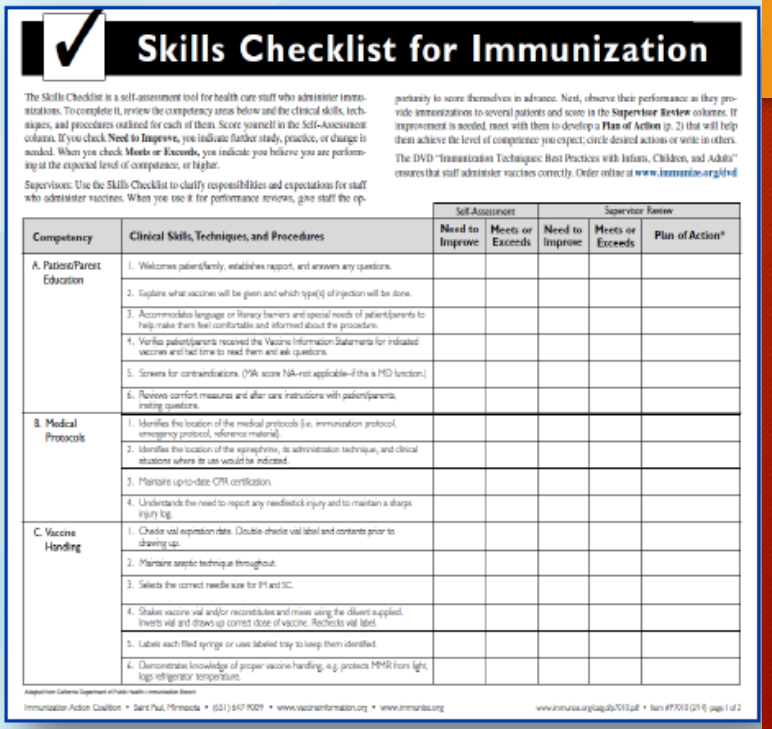
Adult Vaccine Administration

Billing issues

- Medicare vs private insurance

Knowledgeable Staff is Key

- **Before administering vaccines, all personnel who will administer vaccines should:**
  - Receive competency-based training
  - Have knowledge and skills validated
- **Integrate competency-based training into:**
  - New staff orientation
  - Annual education requirements
- **Ongoing education:**
  - Whenever vaccine administration recommendations are updated
  - When new vaccines are added to inventory
- **AND establish an environment that values reporting and investigating errors as part of risk management and quality improvement**



Skills Checklist for Immunization

The Skills Checklist is a self-assessment tool for health care staff who administer immunizations. To complete it, review the competency areas below and the clinical skills, techniques, and procedures outlined for each of them. Score yourself in the Self-Assessment column. If you check **Need to Improve,** you indicate further study, practice, or change is needed. When you check **Meets or Exceeds,** you indicate you believe you are performing at the expected level of competence, or higher.

Supervisors: Use the Skills Checklist to clarify responsibilities and expectations for staff who administer vaccines. When you use it for performance reviews, give staff the opportunity to score themselves in advance. Next, observe their performance as they provide immunizations to several patients and score in the **Supervisor Review** columns. If improvement is needed, meet with them to develop a **Plan of Action** (p. 2) that will help them achieve the level of competence you expect; circle desired actions or write in others.

The DVD "Immunization Techniques: Best Practices with Infants, Children, and Adults" ensures that staff administer vaccines correctly. Order online at **www.immunize.org/dvd**

Competency	Clinical Skills, Techniques, and Procedures	Self-Assessment: Need to Improve	Self-Assessment: Meets or Exceeds	Supervisor Review: Need to Improve	Supervisor Review: Meets or Exceeds	Plan of Action*
A. Patient/Parent Education	1. Welcomes patient/family, establishes rapport, and answers any questions.					
	2. Explains what vaccines will be given and which type(s) of injection will be done.					
	3. Accommodates language or literacy barriers and special needs of patient/parents to help make them feel comfortable and informed about the procedure.					
	4. Verifies patient/parents received the Vaccine Information Statements for indicated vaccines and had time to read them and ask questions.					
	5. Screens for contraindications. (VA: score NA–not applicable–if this is MD function.)					
	6. Reviews comfort measures and after care instructions with patient/parents, inviting questions.					
B. Medical Protocols	1. Identifies the location of the medical protocols (i.e. immunization protocol, emergency protocol, reference material).					
	2. Identifies the location of the epinephrine, its administration technique, and clinical situations where its use would be indicated.					
	3. Maintains up-to-date CPR certification.					
	4. Understands the need to report any needlestick injury and to maintain a sharps injury log.					
C. Vaccine Handling	1. Checks vial expiration date. Double-checks vial label and contents prior to drawing up.					
	2. Maintains aseptic technique throughout.					
	3. Selects the correct needle size for IM and SC.					
	4. Shakes vaccine vial and/or reconstitutes and mixes using the diluent supplied. Inverts vial and draws up correct dose of vaccine. Rechecks vial label.					
	5. Labels each filled syringe or uses labeled tray to keep them identified.					
	6. Demonstrates knowledge of proper vaccine handling, e.g. protects MMR from light, logs refrigerator temperature.					

Adapted from California Department of Public Health's Immunization Branch

Immunization Action Coalition • Saint Paul, Minnesota • (651) 647-9009 • www.vaccineinformation.org • www.immunize.org

www.immunize.org/catg.d/p7010.pdf • Item #P7010 (2/11) page 1 of 2

Skills checklist for immunization
http://www.immunize.org/catg.d/p7010.pdf

Summary

- Vaccine administration can be complex
- Know your
  - Inventory
  - Resources and tools
  - Stay current with vaccine education and updates
- Imagine if…

Resources

Current Immunization Schedules: Children, Adults, Job Aids
https://www.cdc.gov/vaccines/schedules/hcp/index.html

Screening Questionnaires

http://www.immunize.org/handouts/screening-vaccines.asp

Skills Checklist for Immunization

http://www.immunize.org/catg.d/p7010.pdf

Maternal Vaccination

https://www.cdc.gov/vaccines/pregnancy/downloads/immunizations-preg-chart.pdf

Vaccine Labels

https://www.cdc.gov/vaccines/hcp/admin/storage/guide/vaccine-storage-labels.pdf

Questions?

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